

April 2007

SH1 Awatere Bridge *"More than just a bridge"*

Steady as she goes - the Bridge takes shape

Steady progress has been made on the Awatere Bridge Project since the initial sod turning in February 2006.

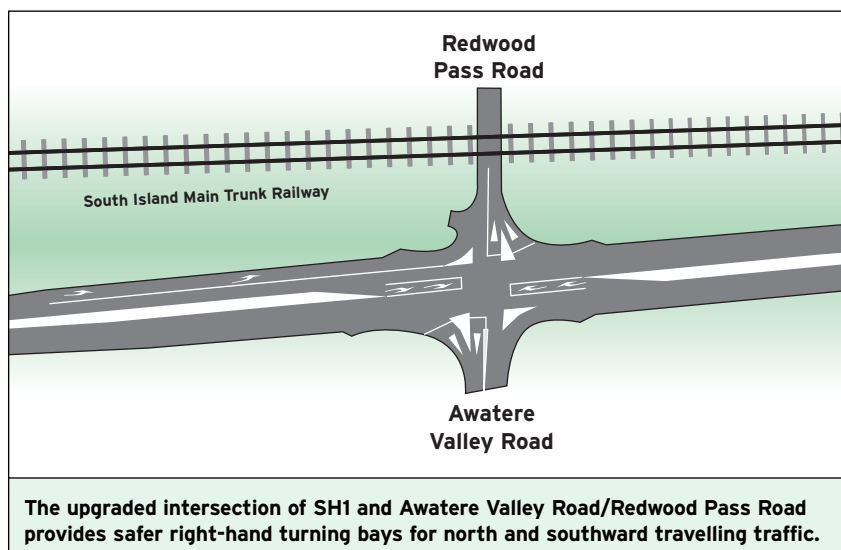
Project manager Andrew Adams says Transit's contractors for this job, HEB Smithbridge, are doing well with work running to schedule.

"At the moment we are on track to complete the project on time and to budget which is very good news. This is an enviable position for a project to be in," Mr Adams says.

Public feedback on the work to date has been very positive. People appreciate that while the work may cause them some inconvenience they all believe the massive benefits the completed scheme will deliver is worth the hassle in terms of reducing travel times and increasing road safety.

At this point, the northbound passing lane has been constructed and should be open by Easter. Opening this lane will coincide with the completion of the Awatere Valley Road/Redwood Pass Road intersection upgrade works which commenced in January 2007. This work was not initially part of the Awatere Bridge Project, but Transit intended to do this work in future. However, Transit was able to do the work ahead of schedule as it made good sense to do this work in parallel with the main project going on nearby.

Work on the river bridge is progressing to plan with two thirds of the bridge beams now in place. The beams are being manufactured on site, then moved by crane into position. Deck units will be placed on



top of the beams to form the bridge deck, which will be finished off by crash barriers being added and the bridge being sealed with asphalt.

Mr Adams says overall the bridge is half finished and he is pleased with the progress.

Of other work to be completed, Mr Adams says the rail overbridge, which eliminates a level traffic crossing of railway lines, is now in place. This structure proved extremely challenging for the contractor to complete because of the size of the components that make up the overbridge. Although they were made near the site, the 750 tonne girders had to be manoeuvred into position within a tight timeframe as the railway line was closed for this to be done.

Excavation underneath the rail overbridge is well under way and the

removed earth will be used as "fill material" for the new road realignment south of the rail overbridge leading to Seddon township.

The last job of the project will be to remove the current lower deck of the river bridge making it for rail traffic only.

"This heralds the end of the line for another road and rail bridge as the Awatere Bridge was one of three of its kind left in New Zealand," Mr Adams says.

However, he says Transit is pleased the 105 year old bridge will be preserved and continue to operate as a rail only bridge. It is an important historic feature of the Marlborough region.

At this stage, the project is expected to be finished in early 2008.

Existing Awatere Bridge

The existing bridge owned by Ontrack is a one-way, single-lane road providing two functions - road and rail service. The structure of the bridge is a wooden deck spanning the Awatere River north of Seddon. Built in 1902, it is one of only three double-decker bridges in New Zealand.

The single-lane capacity of the bridge, in addition to load, height and weight restrictions, results in lengthy traffic delays for road users. The bridge has a history of nose-to-tail accidents and trucks are often getting stuck at either end because of its height.

New Awatere River Bridge

The new bridge will be 274m long and will run parallel to the existing bridge, approximately 30m upstream. The bridge consists of 10 equal spans. The precast concrete deck slabs and U-Beam stringer units are supported on cast in-situ concrete reinforced crossheads which in turn are supported by the bridge's foundations - twin 1.5m diameter steel reinforced concrete piles which will be constructed through the underlying river gravel layer and a further 6m into the papa layer.

The new 10m wide bridge will provide a vastly improved standard of service to all road users.

Northbound passing lane

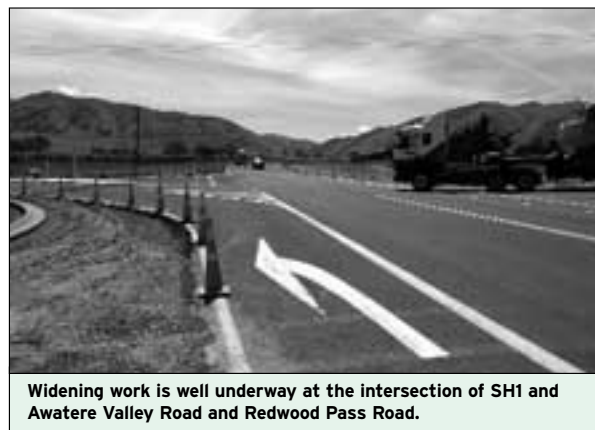
The northbound passing lane starts about 200m north of the new Awatere Bridge and will end before the Awatere Valley/Redwood Valley Roads intersection. With traffic increasing in Marlborough and on SH1, this new passing lane will make overtaking safer for motorists.

New rail overbridge and traffic underpass

The new rail overbridge has been built about 200m south of the new river bridge to support the railway and eliminate a level crossing for motorists. The SH coming down from Seddon will go underneath this structure on a much improved alignment. The highway north of the new river bridge is also realigned as well as widening for the northbound passing lane.

Intersection Upgrade

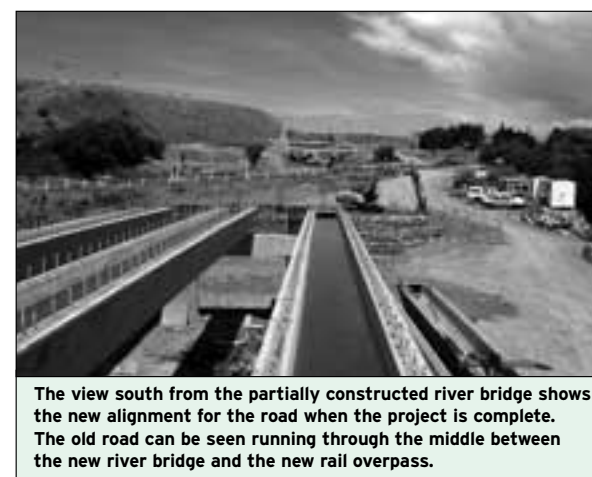
The existing intersection of SH1 and Awatere Valley Road and Redwood Pass Road does not provide much space for traffic turning right from the highway. This was previously identified as a safety issue as traffic volumes increased. Transit is pleased to be able to bring forward the upgrade to coincide with the overall project work. See front page for more information



Widening work is well underway at the intersection of SH1 and Awatere Valley Road and Redwood Pass Road.



Excavation underneath the rail overbridge is well advanced. The new SH1 alignment will go underneath this structure on a much improved alignment of the road.



The view south from the partially constructed river bridge shows the new alignment for the road when the project is complete. The old road can be seen running through the middle between the new river bridge and the new rail overpass.



The new rail overbridge means the existing rail crossing becomes obsolete for motorists.

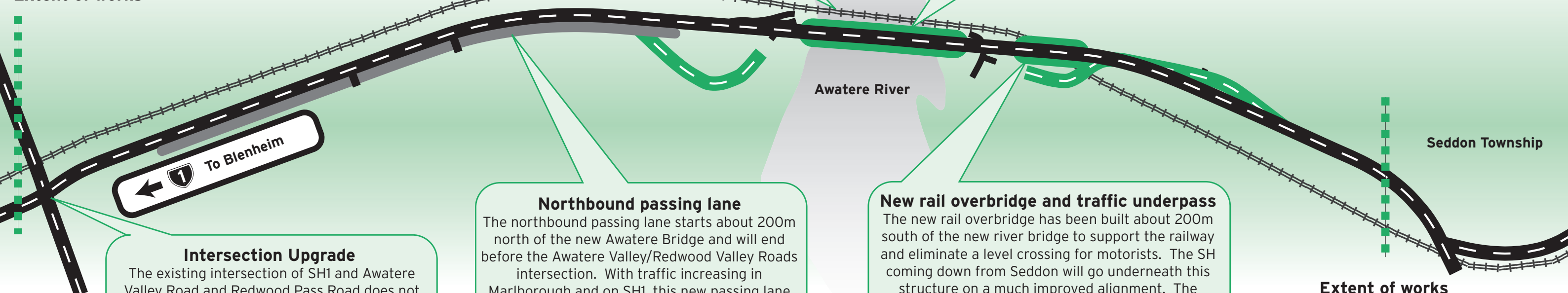


River bridge deck units have been constructed on site before being moved into place.



The view north looking at the Awatere River bridge construction.

Extent of works



Extent of works

About designers Bloxam Burnett & Olliver

Awatere Bridge's designers, Bloxam Burnett and Olliver (BBO), was formed in 1993 as a consulting company, which provides civil and structural engineering, planning and resource management services. The company is wholly owned by employee shareholders and has 30 staff almost all of whom are professionally qualified.

BBO is based in Hamilton but does work throughout New Zealand. In order to provide services throughout the country the company has developed alliances with a range of other consultants.

The company specialises in structural design (including bridges), civil design (including traffic engineering), roading, drainage, and utilities, and resource management work, including obtaining resource consents

and designations under the Resource Management Act. The full range of this specialist expertise is drawn on for major state highway roading projects.

The company has built up an extensive track record of successfully completed major roading and bridging projects including State Highway 1 Mercer to Longswamp (four laning the road), State Highway 1 Rangiriri to South of Ohinewai (four laning), Wairere Drive Arterial Rd in Hamilton and Central Motorway (Spaghetti) Junction in Auckland. BBO also recently completed the upgrading of Tangiwai Bridge on State Highway 49, raising it to allow for the predicted lahar flow from Mt Ruapehu, as well as successfully completing the V8 Supercars Resource Consent Application for Hamilton City Council.

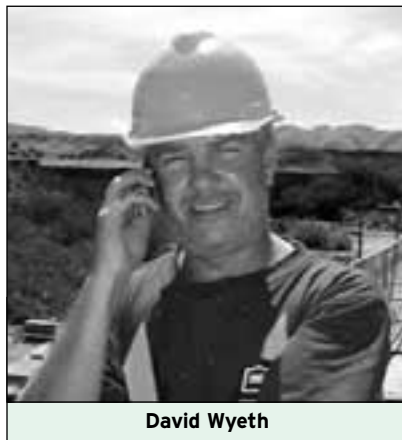
Introducing contract manager David Wyeth HEB Smithbridge

HEB Smithbridge project manager, David Wyeth, has been able to return to his major construction roots with Transit's Awatere Bridge project.

HEB is the company responsible for conducting the work on the project for Transit, and David the man in the "driving seat" for HEB.

David, who came to New Zealand in 2000, originally trained as a civil engineer in England, beginning 26 years ago with a local authority in the roading department. There he designed local roads and sewer schemes and supervised construction, gaining qualifications in civil engineering along the way.

He then studied and attained both a Bachelor and Masters Degree in Civil Engineering, the former with honours. During his studies he worked for several large multi-national companies on large



David Wyeth

construction projects such as the Gatwick Airport extension.

After graduation, David worked for a civil engineering design consultant in England designing roading improvements.

It was after this that David diverged from his major project

background and worked in structural repairs to buildings, bridges and tunnels including setting up and working for his own company.

However, the move to New Zealand meant David could return to his civil engineering and roading past, something he is enjoying.

"It's good fun. It's a little more technically challenging and rewarding getting back to what I was trained to do," he says of the Awatere Bridge project. "There's nothing like thinking on your feet."

David lives in Blenheim with his partner and two daughters and has no regrets of his decision to move to New Zealand for a "lifestyle change".

"So far, it's been a good move all round."

David says work on the Awatere Bridge project is going well and is running to its scheduled programme, due for completion next year.

Background

The original Awatere bridge has serviced the road between Blenheim and Seddon for the past 105 years. It was designed by Peter Seton Hay from Public Works in 1897 as a double-decker structure carrying the train on top and road underneath. It was the longest of its type in New Zealand at the time measuring 325m.

In 1899 the contract to build the bridge was let to Scott Bros Ltd of Christchurch for £22,002 and finished in early 1901. A windbreak was later added to protect trains from northwesterly gales. The bridge was opened in 1902 and had cost approximately pound23,326 when completed.

The project

The Awatere Bridge project includes:

- ◆ construction of a new rail overbridge
- ◆ construction of a new Awatere River bridge
- ◆ realignment of SH1
- ◆ a northbound passing lane north of the bridge

Also added to the project is an upgrade of the intersection north of the bridge to include right-hand turning bays to provide added safety for turning traffic.

The project was set to take two years to conduct and should be completed on time in early 2008.

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